Office of Budget, Finance, Quality, and Management's
Office of Quality Improvement's Representative Payee Misuse Model

BACKGROUND

- In 2004, Congress directed SSA to conduct a study to better determine how representative payees manage and use payments on behalf of beneficiaries.

- The National Academy of Sciences (NAS) prepared the congressionally mandated study in 2007.

- The study data identified a number of representative payee characteristics that appeared to result in the increased likelihood of misuse of benefit funds by representative payees.

- NAS recommended that we strengthen our procedures for detecting potential misuse of benefit payments by representative payees and replace random reviews with more targeted reviews of representative payees.

MODEL DEVELOPMENT

- Our Office of Quality Improvement (OQI) developed two models:

    - Representative Payee Misuse Model for Individuals (RPMI), which targets individual payees serving less than 15 clients, and

    - Representative Payee Misuse Model for Organizations (RPMO), which targets organizational payees.

- We based the RPMI model on a universe of 33 million DI beneficiaries and SSI recipients served by individual representative payees who received payments between 1993 and 2009. About 20,000 of these cases (0.06 percent) involved representative payee funds misuse, representing an annual rate of misuse of 0.01 percent.

- We based the RPMO model on a universe of 2.2 million DI beneficiaries and SSI recipients served by organizational representative payees who received payments between 1993 and 2009. About 5,300 of the cases (0.24 percent) involved representative payee funds misuse, representing an annual rate of misuse of 0.05 percent.

- The RPMI model was estimated on a response-bias sample of 300,000 cases, which included all misuse cases, while the RPMO model was estimated on a response-bias sample of 115,000 cases, which included all misuse cases.

- The RPMI and RPMO used data from the Representative Payee System, the Master Beneficiary Record, the Supplemental Security Record, and the Master Earnings File to develop econometric models to identify the characteristics associated with a higher likelihood of representative payee funds misuse.

- We tested all 15 variables identified in the 2007 NAS study for RPMI model development.

KEY MODEL ATTRIBUTES

- The RPMI and RPMO models are standard logistic regression models with the probability of benefit funds misuse as the dependent variable.

- The RPMI model contains 36 explanatory (or "independent") variables, including 14 of the 15 variables included in the NAS study. The NAS study variable not included (payee without a phone number in SSA records) was tested, but found to be statistically insignificant.

- The RPMI model with only the NAS coefficients performed well, but the final model we developed performed about 50 percent better than the NAS targeting approach.

- The RPMO model contains 15 explanatory variables.

- We expect the top five percent of cases scored by the RPMI and RPMO to contain about four times the rate of funds misuse compared to using the prior random review process.

- We expect the top 1,000 cases scored by the RPMI and RPMO to contain about 20 times the rate of funds misuse compared to using the prior random review process.

MODEL IMPLEMENTATION

- The agency implemented the models beginning in fiscal year (FY) 2012. In that year, the models identified and selected 250 individual payees and 600 organizational payees for review. Since that time, the models select a similar number of payees for review each fiscal year.

- From FY 2012- FY 2014, model-identified case results to date indicate seven cases of misuse for the cohort of individual payees and three instances of misuse for the organizational payee cohort. These results are within the statistical confidence intervals of the model's predicted results for the size cohorts targeted.

- In addition to detecting instances of financial funds misuse, model-based selections have uncovered a number of other issues involving individual and organizational payees, which have led SSA to appoint new representative payees in a number of instances.

- Initial assessment of model performance indicates that the models are performing as intended, but a more complete assessment of model performance will require several years of completed individual and organizational payee reviews given the relatively small number of cases reviewed each year.